

Amendments to the Claims:

Claim 1 (Previously Presented): A substantially pure nucleic acid sequence encoding a serotonin-gated anion channel, wherein said anion channel is regulated by serotonin binding and selectively permits passage of anions from one side of said channel to the other.

Claim 2 (Canceled).

Claim 3 (Original): The nucleic acid sequence of claim 1, wherein said serotonin-gated anion channel is a chloride channel.

Claim 4 (Canceled).

Claim 5 (Original): The nucleic acid sequence of claim 1, wherein said serotonin-gated anion channel is MOD-1.

Claims 6-21 (Canceled).

Claim 22 (New): The nucleic acid sequence of claim 1, wherein said nucleic acid sequence hybridizes to the complement of the sequence of SEQ ID NO:2 under conditions comprising hybridization at about 42°C in about 50% formamide followed by a first wash at about 65°C in about 2X SSC sodium chloride/sodium citrate solution and about 1% Sodium Dodecyl Sulfate, and a second wash at about 65°C in about 1X SSC sodium chloride/sodium citrate solution and about 1% Sodium Dodecyl Sulfate.

Claim 23 (New): The nucleic acid sequence of claim 1, wherein said nucleic acid sequence comprises SEQ ID NO:2.

Claim 24 (New): A substantially pure nucleic acid sequence encoding a serotonin-gated anion channel, wherein said serotonin-gated anion channel comprises SEQ ID NO:3.